

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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COUNTRY	East Germany		REPORT NO.	
SUBJECT	Werk fuer Fernmeldewesen HF (OSW) Production of Television Tubes and Transistors; Organizational Chart		DATE DISTR.	30 June 1953
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THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
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(FOR KEY SEE REVERSE)

25X1 PRODUCTION OF TELEVISION TUBES AT WERK HF (OSW)

1. In 1952, there were approximately 5,000 employees at Werk HF, Oberschoeneweide, and in 1953 this number was increased to about 7,500. The chief of Werk HF is Rudi MUELLER.
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25X1 /See Enclosure
2. One of the principal items of production was television tubes. [redacted] the production had about 40 per cent rejects, and, when the tubes were delivered to the Soviet Union, about 80 per cent were declared defective by the Soviets. This means that approximately 90 per cent of the original production are rejects.
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3. The cause of this high percentage of rejection is the poor quality or raw materials such as metals, glass, etc. which go into the tubes. The use of inferior materials is due to the stress on volume rather than quality. When a worker must produce a certain quota and does not have the necessary good materials, he uses poor materials in order to meet his production norm. The superior position of political workers over scientists in the factories also acts as a deterrent in maintaining the quality of production.

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(Note: Washington Distribution Indicated By "X"; Field Distribution By "#".)

SECRET

-2-

CONSTRUCTION OF TOOLS AND DIES, ETC.

- 25X1 4. In Department 601, [] approximately 20 persons were employed, of which five
25X1 were draftsmen. The chief of this department was Heinz WENDE.
25X1 [] constructed tools and dies for research and development
purposes. Most of the calculations and specifications for these
tools came from the laboratories, but occasionally specifications
were received directly from the Ministry for Machine Construction.
- 25X1 5. [] ovens and machines for the following purposes:
- a. Oven for television viewing tubes
 - b. Melting machine
 - c. Tempering oven for radio tubes
 - d. Miscellaneous laboratory jigs and dies
- 25X1 6. From the size and quality of the machines [] do
not believe that they were intended for series production.
They seemed to be only for laboratory development and research.
- 25X1 7. [] constructed a drying device for applying a mass
25X1 of material on the inside of television tubes. This device
used hot air. A fluid, which could be withdrawn, left the
mass on the sides of the tubes. []
25X1 [] A similar
instrument was made to dry the black paste applied to the end
of the picture tube.
- 25X1 8. The last project [] was a grinding machine to
smooth German crystals for the manufacture of transistors.
The machine was required to: a. cut small discs from a bar
of germanium, b. to smooth these discs in a cone shape,
and c. to smooth a concave portion in the disc.

PRODUCTION OF TRANSISTORSThree Types of Transistors to Be Produced

- 25X1 9. [] three different types of transistors were
planned. These three were:
- a. Two thin wires would have a contact on a cone tip and
be separated by a 5 millimeter distance
 - b. A small crystal disc with the wires making a contact
with the disc and the wires parallel to each other
across the disc
 - c. A disc with both sides concave and on each side a
wire contacting the disc.

Production Scheduled for July 1953

- 25X1 10. It was questionable [] whether these transistors
25X1 could be produced for the first scheduled production in July
1953. It was believed that not many of the transistors could
be produced, since there was only a total of 250 grams of
germanium at Werk HF [] Attempts were
being made to replace germanium with silicon. Ing. NARTH,

SECRET

SECRET

25X1

-3-

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who had developed a transistor at Telefunken before the war which did not use germanium, was directly in charge of the development of transistors, and supervised the department called "Gold and Melting Process and Metals". [] it very likely that Werk HF will succeed in finding a replacement for germanium by the use of silicon. The entire transistor production is a high priority one.

1953 PRODUCTION PROGRAM

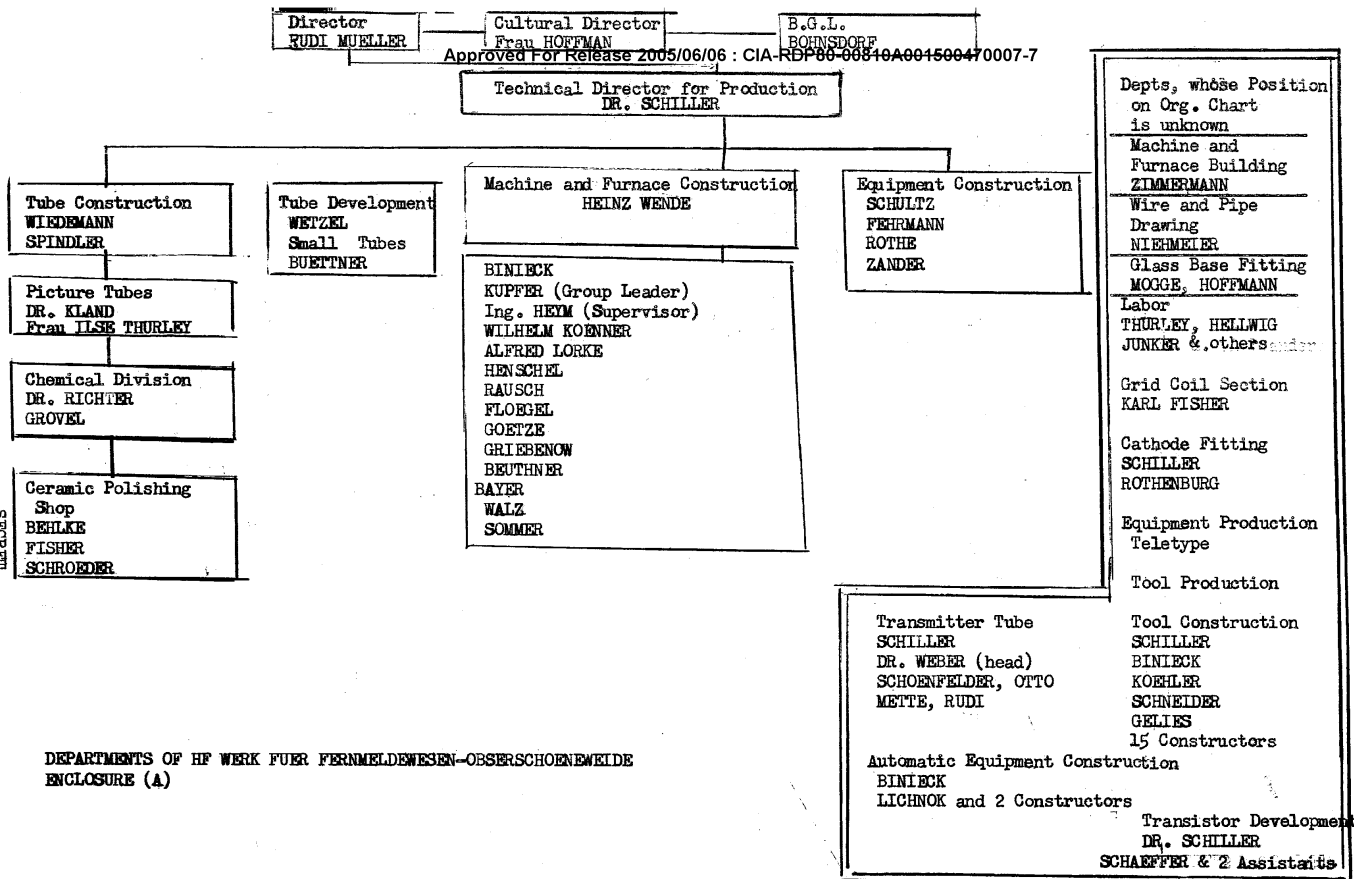
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11. The production schedule for 1953 was announced at a yearly meeting of workers. At this meeting, [] it was stated that miniature tubes, four inch, nine inch, and twelve inch television tubes, and metal ceramic transmitting tubes would be produced. According to this 1953 program, radio tubes were no longer to be produced.

ENCLOSURE (A) Departments of Werk HF

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DEPARTMENTS OF HF WERK FUER FERNMELDEWESEN-OBSERSCHOENEWEIDE
ENCLOSURE (A)

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